



*3<sup>rd</sup> Corps Support Command*



# **Enemy Tactics, Techniques and Procedures (TTP) and Recommendations**

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# Attack Small Elements

- Preference for attacking small (2-4 vehicles), lightly armed convoys with small arms and RPG fire.
- Recommendations:
  - When possible, travel in large convoys
  - Always remain alert!



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# Rear of Convoys

- Enemy forces tend to attack the rear of convoys,
  - Especially convoys with a “weak” rear security element (e.g., no crew served weapon).
  - Hostile forces are actively focusing on vehicles at the rear of convoys to keep the potential attack response to a minimum.
- Recommendations:
  - Ensure your convoy has an extremely visible force protection asset. (The more visible your convoy security is, the less likely you are to be attacked.)
  - Ensure you have a strong rear security element; provide a “trail” rear security element (if available) that shadows the convoy by a few hundred meters. This force can more quickly and accurately engage hostile forces that attack our convoys from the rear.



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# Time of Day

- Most attacks are taking place early morning and late evening.
  - From 2100-0300 remains a very dangerous time to be on the road.
  - There has been a recent increase in the amount of daylight attacks.
  - Many units are not returning fire and enemy feels confident they can escape.
- Recommendations:
  - Stay off the MSR's during times of darkness
  - Remain alert no matter what time you are on the MSRs and ASRs.

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### IEDs

- Increasing use of Improvised Explosive Devices (IEDs) and/or mines in roads.
- Recommendations:
  - Do not attempt to move, or stop for, items in the road, to include:
    - Boxes
    - Bags
    - Debris
    - Animal Carcasses
    - UXO
    - Soda Cans
    - Broke-down vehicles
  - Give wide clearance to any items on the roads.
  - Remember the rules for obstacles - They are being observed. Hostile forces may directly target Coalition forces that stop to investigate or clear IEDS—do not stop near a suspected IED.

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### **MINE TYPES**

- **ANTI-PERSONNEL** - DESIGNED TO KILL OR MAIM DISMOUNTED TROOPS
- **ANTI-TANK** - DESIGNED TO DESTROY OR DISABLE TRACK OR WHEELED VEHICLES
- **CHEMICAL** - DESIGNED TO DISPENSE SMOKE, CS OR MORE DANGEROUS BIOLOGICAL OR CHEMICAL AGENTS



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### **FUZE TYPES**

- PRESSURE
- OVER PRESSURE/DELAY
- SEISMIC
- MAGNETIC
- CHEMICAL
- TRIP WIRE (PUSH/PULL)
- COMMAND DETONATED

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### **MINE REMOVAL**

US ARMY DOCTRINE ON HANDLING MINES AND UNEXPLODED ORDNANCE:

**US FORCES SHOULD NOT ATTEMPT TO DISARM OR PHYSICALLY MOVE ENEMY OR UNOBSERVED US MINES. OUR GOAL IS TO DESTROY MINES IN PLACE.**

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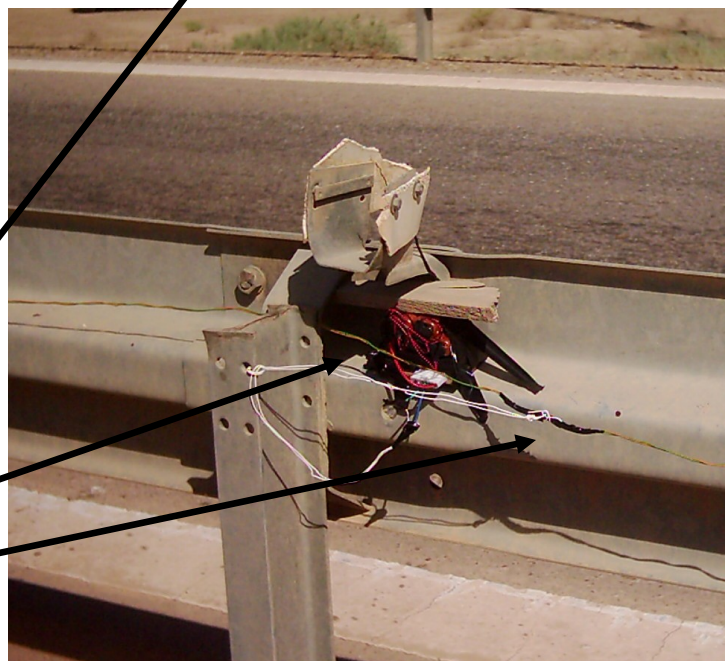


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IED Hidden in Plaster made to look like concrete block on side of road under debris

Garage Door opener detonation device (Notice Wire)



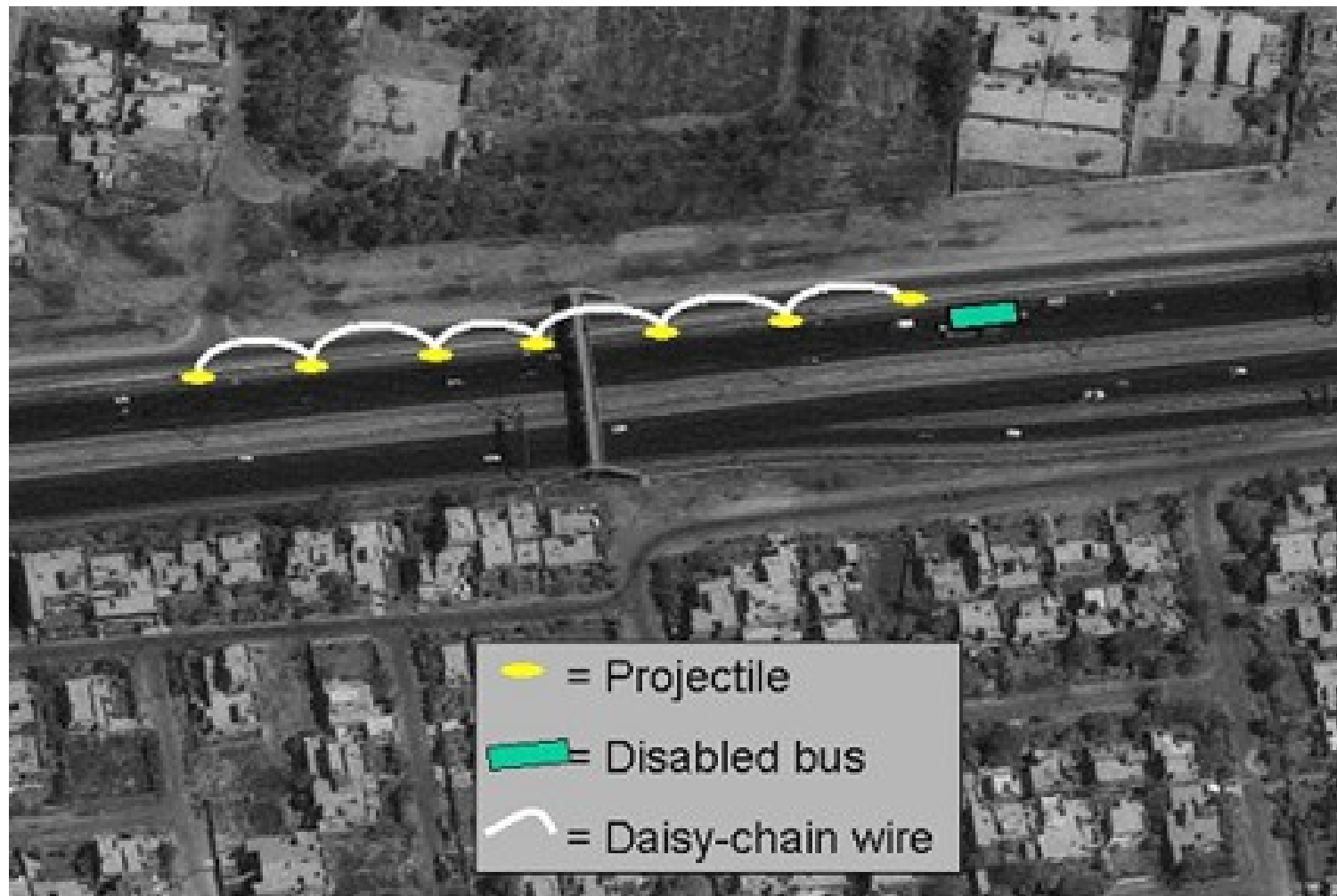
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### Daisy-Chain (Parallel Series)



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A "daisy chain" of munitions is two or more explosive devices wired together so that a single signal will detonate all the munitions at the same time. Figure 6 came from Zone 28 in Baghdad. The disabled bus (the green box in the photograph) is believed to be positioned to cause traffic to slow down and therefore increase the time the U.S. convoy or vehicles must be in the kill zone. In this example, the IED was not completed when it was discovered. The wire from the daisy chain to the detonator was missing. Notice that in this example there are several possible hide sites. The enemy could have been positioned in one



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# IED



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- **130mm HE projectile in Plastic bag.**

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### More IED



**UNCLASSIFIED//FOR OFFICIAL USE ONLY**

- 130mm HE projectile in burlap bag (notice wires coming out of bag)

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### IED / INCENDIARY 16 June 03 – Ad Dawr

**Choice of a new  
generation PEPSI  
w/an Explosive Twist**

- Incendiary Device
- Min Safe Distance  
50m
- Pepsi Can with  
Fuse  
secured with tar
- Fuel Source:  
Propellant / black  
powder
- Ignition: Time Fuse



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**IED / EXPLOSIVE**



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### **IED / EXPLOSIVE**



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### IED / EXPLOSIVE



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### **IED / EXPLOSIVE**



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### IED / EXPLOSIVE



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### IED Booby Trap 11 MAY 03



- Booby trapped Poster Of Saddam Hussein
- Min Safe Distance 150m
- RG-42 AP Grenade
- Ignition: Pull-Release

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### IED / INCENDIARY 21 MAY 03



- Initially wrapped in foil
- OD Green in color
- Wrapped in Twine
- Clusters of 2 left in open
- 7.62 Casing stuck in hole as blasting cap

- Incendiary Device
- Min Safe Distance: 50m
- Fuel Source: Black Powder
- Ignition: Electrical Leads



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### IED / explosive



- Explosive Device
- Min Safe Distance: 150m
- Fuel Source: Artillery Propellant
- Ignition: RGM grenade fuse

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# Be Aware of Overpasses and Crowds

- One of the most prominent methods of attacking convoys has been attacking from overpasses with small arms, RPGs and IEDs.
  - This allows an attacking force good observation and fields of fire, good cover and concealment (often), and quick escape routes.
  - Attackers may use demonstrations or crowded market places as a distraction to mask their movement right before they attack with IEDs or small arms fire.
- Recommendations:
  - Do not to stop under overpasses.
  - Be extremely cautious when approaching overpasses.
  - Be on the lookout for personnel on overpasses observing you; they may be preparing to drop/throw a grenade or IED at your convoy.
  - Recommend vehicles switch lanes as you draw closer or as you go under overpass to position yourself in the opposite lane of the one being targeted.

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# Be Aware of Overpasses and Crowds

(Cont)

- Recommendations: (Continued)
  - Avoid routes where there are built up areas. If a convoy must go through built up area then move out as swiftly and safely as possible.
  - Do not stop at any point, if possible. Maintain a steady speed throughout the convoy of no less than 35mph.
  - Most overpass ambushes are directed at the rear/trail elements of a convoy.
  - Use a "road-guard" concept (similar to conducting PT runs) in which a front gun truck speeds up to and past the overpass, then sits in overwatch with the gun trained on the overpass as the rest of the convoy passes under. The rear gun truck then relieves the front gun truck in overwatch until the convoy is out of small-arms range, then speeds up to resume rear security.
  - Roll windows up in crowded areas and watch for personnel approaching your vehicles.
  - Lead vehicle in each convoy be equipped with binoculars to scan overpasses from a greater distance for potential threats.

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# Ramming

- Ramming vehicles from behind, or attempting to disrupt, slow or isolate vehicles in a convoy by driving between vehicles in convoy.
  - They may be attempting to slow or stop your convoy to execute an attack.
  - There has recently been an increase in civilians trying to cause vehicles in convoys to swerve or stop, especially in southern Iraq.
- Recommendations:
  - Rear security element must be alert for suspicious activity or peculiar behavior by civilian vehicles driving around your convoy.
  - The current Rules of Engagement allow you to take the appropriate actions to remove the threat. Consider firing warning shots, or shoot to disable the vehicle if the threat persists.

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# Motorcycles

- Use of motorcycles to attack convoys.
  - Motorcycles allow for quick escape from an attack site.
  - Quick and maneuverable.
- Recommendations:
  - Be alert for motorcycles with driver and passenger.
  - Passengers may be used to attack convoy with grenades, RPGs or small arms.



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# Signal Devices

- Use of flares or gunshots to signal your approach.
- Recommendations:
  - Be cautious when you observe flares; these have been used to signal/warn of approaching convoys/patrols for potential ambushes.
  - Bursts of gunfire have also been used to signal the approach of convoys/patrols.
  - Convoys should limit use service drive (makes them more visible to hostile forces). U.S. military vehicles are the only vehicles using headlights during day; which makes them “stick out” and easier to identify at a greater distance to hostile forces.

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# Other Signals

- Watch for other signaling measures and signs, particularly in urban areas.
- Recommendations:
  - If you approach a village during hours of darkness, and observe the lights in houses going off, be alert! This may be a form of signaling to hostile forces that your convoy is approaching.
  - If you observe an absence of children in area where previously there were numerous children, stay alert! The locals/parents may have been warned of an impending attack, and the children may have been pulled out of the area by worried parents.



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### **VISUAL DETECTION**

- SURFACE LAID MINES ARE USUALLY VISIBLE
- SIGNS OF ROAD REPAIR (NEW FILL, PAVING, ROAD PATCHES, DITCHING OR CULVERT WORK)
- WIRES LEADING AWAY FROM THE ROAD
- ODD FEATURES OR PATTERNS
- PIECES OF WOOD OR DEBRIS ON ROAD.
- SIGNS TREES, POSTS OR STAKES.
- DAMAGED VEHICLES OR DEAD ANIMALS.

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### **LIKELY LOCATIONS FOR MINES AND BOOBYTRAPS**

- MOUNTAIN PASSES AND NARROW ROADS WITH NO SHOULDERS OR BYPASSES
- OLD CHECK POINTS AND BATTLEFIELDS
- ALONG OBSTACLE BYPASSES
- OBVIOUS REST AREAS/CLEARINGS ALONG ROADS
- ABANDONED BUILDINGS AND STRUCTURES
- ABANDONED WEAPONS AND TRINKETS ATTRACTIVE TO SOUVENIR HUNTERS

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### **OTHER DETECTION METHODS**

- LOCAL CIVILIANS MAY KNOW WHERE MINES AND BOOBYTRAPS ARE LOCATED IN THE AO.
- LOCAL MILITIA FORCES MAY BE ABLE TO PROVIDE ASSISTANCE IN LOCATING TACTICAL MINEFIELDS.
- LOCALLY KNOWN MARKING SYSTEMS (ROCK PILES, BROKEN BRANCHES ON TREES, CROSSED STICKS ON ROADS)



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# Observers

- Use of scouts/recon assets, to include photographing or videotaping of convoys. Recently the enemy has been caught utilizing periscopes to observe coalition activities.
- Recommendations:
  - Be observant of people observing you.
  - If personnel appear to be counting the number of vehicles in your convoy, or seem overly interested in your convoy, stay alert!
  - These personnel may be a scout or recon asset for a potential ambush force farther down the road, and may call/signal your approach to this ambush force.



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# Beware of Children

- Use of children/teenagers to conduct attacks.
  - There have been several attacks on Coalition forces that have involved adolescents as either attackers or “scouts.”
  - Children have also been given explosive vests to wear then sent to coalition troops.
- Recommendations:
  - Do not assume children are harmless!
  - Be wary of children approaching your vehicles, or observing your convoy from an overpass.
  - Hostile forces could be using/forcing these adolescents to conduct attacks.

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# Cover and Concealment

- Attacks from access roads, buildings, overpasses or thick brush along MSR/ASRs.
  - The enemy will use the above for cover/concealment when attacking, and access roads allow for a quick escape after attacking a convoy/patrol.
  - Rooftop observation by hostile forces is a common tactic.
  - Hostile forces may warn civilians of impending attacks.
- Recommendations:
  - Be cautious while traveling through or by any of the above locations.
  - In conjunction with other TTP observed (e.g., use of flares/gunfire to signal your approach; during darkness), you may be able to anticipate and avoid an ambush.
  - Convoys should be aware of changes in civilian traffic patterns, cautious of unusually quiet areas, and be alert for local nationals watching/observing you from an unusual location (like a rooftop).

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# Baiting and Lures

- Feigning injury/leading U.S. forces into an ambush.
  - Recently, hostile forces have attempted to lure Coalition forces into ambushes by feigning injuries (resulting in Coalition force attempting to offer help being ambushed).
  - “**Trusted**” local nationals have led a patrol to a supposed target, only to have the patrol ambushed. Several vehicle bomb and suicide bomber attacks were made at checkpoints during combat operations in Iraq during March and April.
  - An Iraqi posing as a taxi cab driver feigned a break down and detonated his vehicle when four soldiers approached killing them all.
  - Three Rangers were killed in western Iraq when an SUV drove up to their checkpoint (along with other cars) and then exploded.
  - In another instance, an Iraqi at a checkpoint set off explosives hidden under his clothes wounding a number of Marines.
  - In all cases, deception was used to get close to U.S. forces and increase the effect of the attack.

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# Baiting and Lures (Cont)

- Recommendations:
  - Be aware of these tactics. Do not lower your guard at any time, and it is not recommended you stop your convoy to offer assistance to “wounded/injured” Iraqis.
  - Recommend all convoys be equipped with tow bars or tow straps for quick recovery operations after an ambush.
  - All vehicles (to include NTVs) be reinforced with sandbags to help defeat the effects of IEDs/mines/RPGs.

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### Emerging TTPs

- **BROKEN-DOWN VEHICLE:** HUMINT from Taji area: Vehicle on side of road with hood up waits for convoy to pass; once convoy passes, truck pulls out and follows convoy to a designated escape point where it shoots convoy rear vehicle and turns off (escapes). Remain situationally aware; watch for vehicles on side of MSR with hoods up.
- **CAR SEAT IED:** On 30 August, an Iraqi Security Council member living in Baghdad died shortly after he sat on what was probably a pressure detonated IED placed under his car seat; first reporting of a pressure detonated IED placed under a car seat. Never leave vehicles unattended, or park in secure compounds. Visual inspection of vehicle prior to use.
- **TIME DELAY FUSE AS DETONATOR:** IED discovered on 29 July on "Line Road" west of Taji had three artillery shells rigged with a time-delay detonation device; first reporting of use of time-delay detonation devices with IEDs in Iraq. This gives the enemy the advantage of utilizing unmanned standoff attacks, but requires heavy surveillance of targeted area for military convoys and traffic to determine the best times to utilize such devices. Randomly timed convoys and traffic movement will help to counter the effectiveness of time-delayed IEDs.
- **USE OF IED AIMING POINTS:** On 22 August, a convoy on MSR Tampa in Tikrit was attacked with an ED. Investigative team identified a probable aim point in median of MSR; consisted of a mound of dirt with a paint can on top; also found a probable hide site consisting of concrete blocks ~50 m east of MSR; hide site allowed line of sight to the aim point, which lined up with the detonation site. Proper dispersal of vehicles in convoy will minimize damage from IED explosion.

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# **DRIVING HAZARDS &** **CONVOY OPERATIONS**

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# **CONVOY OPERATIONS**

## **CONVOY PREPARATION AND BRIEFING**

- **CONVOY CONFIGURATION**
- **BREAK IN CONTACT**
- **VEHICLE BREAKDOWN**
- **HARDENING A VEHICLE AGAINST A MINE STRIKE**

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# **CONVOY OPS PREPARATION**

## **RISK ASSESSMENT**

**ID RISKS**

**ID RISK REDUCTION CONTROL  
MEASURES**

**INCORPORATE INTO PLAN**

## **SITUATIONAL AWARENESS**

**WEATHER / TERRAIN**

**FRIENDLY / FACTIONAL SITUATION**

## **DEVELOP PLAN**

**OVERALL PLAN**

**GRAPHICS**

**COORDINATE &  
REHEARSE DRILLS**

## **MANIFEST**

**PERSONNEL**

**VEHICLES / CARGO**

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# **RISK MANAGEMENT & REDUCTION**

### **HAZARD IDENTIFICATION:**

- ROAD CONDITIONS
- LOCAL DRIVING CUSTOMS
- CONVOY OPERATIONS

### **RISK ASSESSMENT:**

EXTREMELY HIGH

EXTREMELY HIGH

EXTREMELY HIGH

### **RISK MANAGEMENT & REDUCTION:**

#### **HAZARDS**

- ROAD CONDITIONS
- LOCAL DRIVING CUSTOMS
- CONVOY OPERATIONS

#### **CONTROLS**

- REST, PLAN, REHEARSE!
- ROUTE RECON
- RISK IDENTIFICATION
- ACTIONS ON BREAKDOWN /  
BREAK IN CONTACT
- CONVOY BRIEFING

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**CONVOY OPS**  
**BRIEFING**



**MISSION**

**INTEL**

**COORDINATING INSTRUCTIONS**

**ROUTE / ALTERNATE ROUTES**

**MEDICAL / MAINTENANCE SUPPORT LOCATIONS**

**SP & RP (TO INCLUDE DESTINATION)**

**RATE OF MARCH / CATCH UP SPEED / INTERVALS**

**BREAKDOWN PROCEDURES**

**SECURITY**

Unclassified /



# *3<sup>rd</sup> Corps Support Command* **CONVOY OPS BRIEFING**



## **COORDINATING INSTRUCTIONS**

**CHECK POINTS / RALLY POINTS**

**ACTIONS AT HALT (SCHEDULED / UNSCHEDULED)**

**ACTIONS ON CONTACT**

**MINE STRIKE PROCEDURES**

**ACTIONS IN THE EVENT OF BREAK IN CONTACT**

**COMMAND AND CONTROL**

**COMMUNICATIONS (FM & COMMERCIAL)**

Unclassified /



# *3<sup>rd</sup> Corps Support Command* **CONVOY CONFIGURATION**



## **VEHICLE PLACEMENT:**

- CREW SERVED WEAPONS
- CONVOY COMMANDER
- RECOVERY VEHICLE



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# BREAK IN CONTACT

- MECHANICAL BREAKDOWN
- NAVIGATION
- ENEMY CONTACT
- MINE STRIKE
- LIVESTOCK, BICYCLES OR  
PEDESTRIANS IN THE ROAD

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# VEHICLE BREAKDOWN

- WARNING LIGHTS
- WARNING TRIANGLES
- RECOVERY ASSETS
- MINE AWARENESS
- NUMBER OF VEHICLES IN CONVOY

Unclassified /



# **DRIVING HAZARDS**

## **SAFETY !!! (ROAD AWARENESS)**

- **POOR ROAD CONDITIONS**
- **NARROW ROADS (LIMITED MANEUVER SPACE)**
- **PEDESTRIANS, LIVESTOCK**
- **BICYCLES**



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# **MINE STRIKE MOUNTED**

- **IF A VEHICLE IN A CONVOY ON A PREVIOUSLY CLEARED ROUTE STRIKES A MINE, ALL OTHER VEHICLES IN THE CONVOY IMMEDIATELY STOP.**
- **MOVING OFF THE ROAD OR TOWARDS THE SHOULDERS (HERRING BONE) COULD EXPOSE MORE VEHICLES TO MINES.**
- **SECURITY IS PROVIDED BY MAINTAINING VEHICLE SPACING AND ALTERNATING VEHICLE MOUNTED WEAPONS.**
- **DISMOUNTED MOVEMENT SHOULD BE RESTRICTED UNTIL A PATH TO THE DISABLE VEHICLE IS CLEARED AND MARKED. ONLY IN EMERGENCIES, YOU SHOULD CLIMB OVER VEHICLES AND MOVE THROUGH TIRE/TRACK MARKS.**



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**REMEMBER!!!**

## **CONVOY OPERATIONS**

- **4 VEHICLE MINIMUM**
- **STAY ON THE ROADWAY**

## **4 RADIO FREQUENCIES**

- **DEPARTURE POINT**
- **CONVOY**
- **DESTINATION**
- **MEDEVAC**

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# **HARDENING A VEHICLE AGAINST A MINE STRIKE**

- **USE SAND BAGS IN OVERLAPPING LAYERS, COVERING THEM WITH A RUBBER MAT CAN PROLONG THEIR LIFE.**
- **MINIMIZE SOLDIERS INJURIES.**
- **MINIMIZE EQUIPMENT DAMAGE.**
- **PASSENGER SIDE OF A HMMWV, YOU COULD USE AN ARMOR VEST.**

## **CAUTION:**

- **ADDED WEIGHT WILL INCREASE THE STOPPING DISTANCE OF THE VEHICLE.**
- **DO NOT EXCEED THE VEHICLE WEIGHT CAPACITY.**
- **MAKE SURE SAND BAGS ARE SECURE SO THEY WILL NOT IMPEDE THE DRIVERS CONTROLS.**



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### Bottom Line

- Situational Awareness
- Be Prepared
- Communications
- Keep Moving



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### REVIEW

- Understand the mine threat risk reduction measures.
- Know the indicators of mines and booby traps.
- Steps to take when you encounter mines, UXO, or booby traps.
- Expedient marking systems.
- Mine strike drill.

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